DECEMBER 2005

JOHN DEERE JOURNAL

for JOHN DEERE EMPLOYEES and RETIREES WORLDWIDE

STAYING ON TOP IN THE LAND DOWN UNDER

WHAT'S INSIDE

- *John Deere Agri Services, Inc.*
- *Dating the first factory*
- *Spend management adds to the bottom line*

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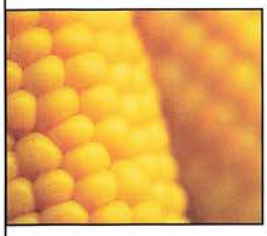

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FeedBack

To the editor:

The instant Everett "Pops" Lee heard the rumble of the engines, he knew John Deere tractors were coming down the road.

Bob Jones, left, Lester Drinkwater, and Terry Bolger helped John Deere retiree Everett Lee, foreground, celebrate his 90th birthday by riding in on restored John Deere tractors.

Two restored John Deere tractors, a 1938 "B" and a 1951 "A," were called into service to help Everett celebrate his 90th birthday. They were the same models of John Deere tractors that he had used while farming in Bruce, S.D.

Everett retired from the Product Planning Department at John Deere in 1975, after a 30-year career that he began as a territory manager in 1945.

Terry Bolger
Elk Grove Village, Ill.

John Deere enthusiasts show a can-do attitude

From our mail, we see that aluminum cans often trigger an urge to build something with them. For John Deere retiree Richard Veberg and his wife Diane, that something was a representation of a John Deere tractor. It took more than 600 aluminum cans to build it.

Like the Vebergs, Charlie Kastens, of Salome, Ariz., also made a tractor out of aluminum cans, as an entry in a festival parade.

Australia Branch *keeps John Deere atop a key market*

A John Deere 9970 Cotton Picker works a field near Hillston in New South Wales.

The Australian Open, the first tennis Grand Slam event of the year, brings tens of thousands of tourists to Australia in January, and some will show up at the door of John Deere Limited's Parts Distribution Center a few kilometers from the tennis center in Melbourne.

"People come in off the street and ask for tours," said Tony Paltridge, Manager, Parts and Logistics, for John Deere Limited. "We're much more visible," he said, referring to the big distribution center that opened in 2001 in Melbourne's fast-growing western suburbs and is now being expanded. "We're not in the back blocks anymore."

The employees of John Deere Limited, who serve Australia and New Zealand, an area about the size of the continental U.S., have brought John Deere out of the back blocks throughout the region.

That helps account for the branch's record years in 2004 and 2005 and its plans for continued growth.

"The John Deere name has always been strong in the rural areas," said Ross Johnstone, Manager, Human Resources and Administration. "Now it has increased its reputation in the major metropolitan centers."

John Deere lawn tractors and other C&CE products are showing up more and more in the suburbs and cities. That's particularly satisfying to John Deere Limited employees, who set out three years ago to build up the C&CE equipment business in Australia and have doubled it in just the last three years.

Since it began selling lawn and turf equipment in 1988, John Deere Limited has become the largest seller of John Deere lawn care products outside of North America, said Rod McDonald, Marketing Manager, Commercial & Consumer Equipment Division.

"Years ago," Johnstone said, "I would go to Aussie backyard barbecues in the city, and people would say, 'Who do you work for?' and I'd tell them, 'John Deere,' and they'd say, 'Who's that?' But now they say, 'Oh, John Deere — they make good equipment.' "

He said the quality of the product and the growing reputation of the company help account for that.

John Deere's reputation for quality goes a long way in Australia, Paltridge said. "We live here under what we call the tyranny of distance," he said.

Australia may be the smallest continent, but it's the sixth-largest country in the world by land area. Its 20 million residents live mostly on or near the country's 22,000 miles of coastline, most in the east and southeast. A farmer near Perth, in the wheat- and milo-growing area of Western Australia, for example, would have to travel 2,700 miles to visit John Deere Limited headquarters in Brisbane.

There are no close factories for farm equipment, either. New machines can be there in three months if everything goes right and they don't get tied up in port. Australia has some of the world's toughest importing regulations and quarantine policies. "When we import, it has to be done perfectly," Paltridge said. "We work with the factories a lot on that."

"The biggest issue for the branch is product availability," said Jim Bullock, Marketing Manager. "We have to order five months out, and the Australian climate is erratic. It can go from boom to bust in three months, and we've got nowhere to send the products when they get here. We can't trade stock with other regions. It makes for some interesting times."

Even so, John Deere Limited has made John Deere the leading brand among farmers who are famous for being particular about their machinery. "Our growers work hard to find ways to control input costs," said Kerrie Keeler, General Manager, John Deere Limited.

"They have to compete on the world market," she said.

Farming is a tough business everywhere, but in Australia it can be brutal. "For the long haul, there are about one percent fewer farms every year," Bullock said. "Australian farmers sell to the world at world prices, usually set in U.S. dollars. There is very little government subsidy, so there is an intense focus on efficiency and value adding. For example, the higher the protein content they achieve with their crop, the higher the price they receive."

Add that water is a precious national resource because of limited and inconsistent rainfall, and don't forget that ever-present "tyranny of distance."

The challenges make Australian farmers sophisticated businesspeople, quick to adopt new technology in the quest for efficiency, and appreciative of extra efforts.

That's why John Deere Limited sells the combine harvesters with special second gears for the faster harvesting Australian farmers prefer, 45-foot or 50-foot harvesting platforms, and 4920 Sprayers with 120-foot booms used in the broadacre farming in Western Australia, where 20,000-acre farms are common.

"Farming techniques are similar to those in North America," Bullock said, "except here they are very technology-focused." Australian farmers were early developers of some of the technology, like global positioning to guide fieldwork, that John Deere sells through its AMS unit. Bullock said controlled traffic farming is expanding rapidly in Australia. He said the main benefits it provides are reduced soil compaction

Training in all aspects of operations is important at John Deere Limited, and that includes getting equipment safely into the country. Here, employees of ocean shipper Wallenius Wilhelmsen Lines and logistics firm Patrick General Stevedoring learn about John Deere products at Webb Dock in Melbourne.

and input costs. AMS gives farmers the precision required to make controlled farming a success, he said.

Not taking anything for granted, one dealer in Western Australia has employed two agronomists to study the relationship between AMS and production efficiency.

Market leadership requires not only technology, but fundamentals done right, like dealer development and parts and service support.

John Deere service is the best available to Australian and New Zealand farmers because of the relationships Paltridge and his colleagues have established and maintain with service providers.

"We've had to build service around what dealers and customers required, and we contracted for that," Paltridge said. "We use express freight, international air freight, and sea freight. We fly parts in. If a dealer orders a machine-down part Monday afternoon, he'll get it Friday by lunchtime, and no one else can do that."

"Small aircraft is how most parts get across the country," Paltridge said, "but we'll use anything we can." For three dealers, parts go to the local baker, who delivers them on his route.

John Deere Limited staffers routinely perform what other venues would call extraordinary service feats. It's not unheard of for an employee to drive 150 miles to meet a dealer halfway and deliver a part. One employee decided to fly from Brisbane to New Zealand clutching a forage harvester part in his hand to be sure it got there. Holidays are routinely interrupted. "This is not a big operation, but parts and warehousing can be accessed 24 hours a day, seven days a week," Paltridge said, "so people are called out."

There are now 203 dealers with C&CE contracts, 122 of whom also have Agricultural Equipment contracts. In just the past year, the branch has added seven C&CE dealers and three Ag dealers, among other developments.

Realizing the value of keeping top-notch dealers up to date on products and merchandising, John Deere Limited has been laying the groundwork for more dealer training. "We don't train enough," Bullock said. "It's not a matter of the dealers traveling here — they're prepared to come here. We just haven't had the training in place."

That's being remedied with an expansion of the training facilities and adding trainers.

"That's what a branch is all about — selling product and developing dealers," said Keeler, who took over as General Manager in February. "We're excited about the new training center in Brisbane and the parts distribution expansion. Australia and New Zealand are key markets, and we are a fully functioning organization. Employees are executing corporate strategies, and I'm excited about being a part of it."

Grapes are growing

One of the growing markets in Australia is wine grape producers.

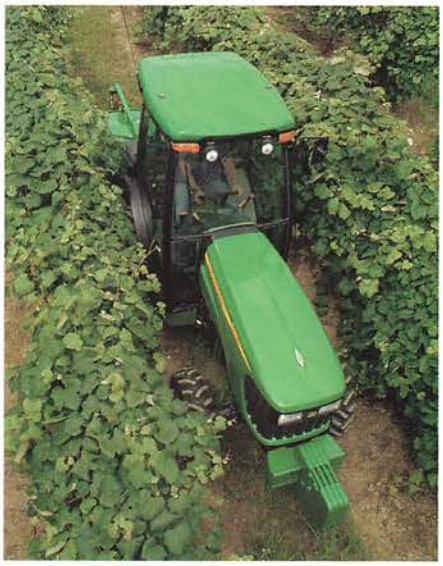
"One of the things going on there is that vineyards are moving from being structured around family farms to being heavily influenced by big corporation farms owned by the major wineries," said Jim Bullock, Marketing Manager, John Deere Limited. "The wine business is really growing."

In fact, Australia, with 7,000 wine grape growers supplying 1,800 wineries, has become the sixth largest wine producer and fourth largest wine exporter in the world. Twenty-five years ago, wine exports were virtually nonexistent.

Exports of wine are growing at between 10 percent and 30 percent a year, and totaled $2.5 billion last year.

The change to an industry largely owned and heavily influenced by winery corporate farms is making volume sales of tractors possible. For example, John Deere Limited recently agreed to a five-year deal with one big wine company under which the wine company uses only John Deere tractors. "That's about 200 tractors to be replaced over the next five years," Bullock said.

Such opportunities are rare in most commodities. Except for grape growers and cotton producers, virtually all farms in Australia are family-owned and -operated.



A John Deere 5025 Series Narrow Tractor moves through a vineyard. Australia's wine industry is growing rapidly.

FACILITY EXPANSION IS PART OF THE BUSINESS LANDSCAPE

John Deere Limited's headquarters is located in the Crestmead Industrial Estate in Logan City. "That's the city right next to Brisbane," said Ross Johnstone, Manager, Human Resources and Administration, "but few people outside the State of Queensland have heard of Logan City, so we call it the Brisbane branch."

The head office moved to Brisbane in 1993 from Perth in Western Australia. Perth had been the headquarters of Chamberlain John Deere Pty. Limited when John Deere bought the remaining stock of the company in 1989. Chamberlain was founded in 1947 and merged with John Deere in 1970.

The Brisbane facility now includes the offices of John Deere Limited, John Deere Credit Limited, and a distribution center, which currently is the main distribution center for Commercial & Consumer Equipment products. Underway is a project to double the size of the John Deere Credit offices and expand the facility's training center. To accommodate the expansions and streamline distribution, grounds care product distribution moved to the company's distribution center in Melbourne, the size of which has been doubled to 215,000 square feet.

John Deere Limited's Power Systems Division also has a facility near Sydney in New South Wales.

The unusual thing about John Deere Limited is that its finance, human resources, and IT functions support not only the branch, but most of John Deere's other operations in the region, which include John Deere Credit Limited (HR & IT); Waratah operations in Melbourne and Tokaroa, New Zealand; as well as the HR and IT functions for numerous individual employees located in the region from other divisions, including AMS, Cameco, Vapormatic, and C&F. John Deere Limited also takes care of the IT networks for John Deere Asia Pacific Limited, based in Hong Kong.

John Deere Limited just completed its new parts distribution center in Melbourne.

John Deere LIMITED *keeps a record pace*

John Deere Limited has just had the two best years in its history, in sales, in profitability, in market share growth in tractors and combines, and as measured by dealer satisfaction.

That kind of performance doesn't just happen, especially when markets are growing. Fundamentals like marketing, delivery, dealer development, and customer service — not to mention the work of John Deere Credit Limited to support the branch's efforts — all have to be done right to sustain top performance.

"Our growth has put our infrastructure under pressure," said Tony Paltridge, Manager, Parts and Logistics. "The system pops a few rivets occasionally," he said, "but it still delivers."

For example, even though shipping capacity throughout the world has been strained during the last two years, John Deere Limited maintains good parts and wholegoods delivery records. "John Deere being John Deere helps with that," Paltridge said.

"Some shippers will take John Deere on as a kind of hobby, because they like our values and the way we do business. An air freight company told me they like working with John Deere, because, they said, 'When you say something, you mean it, and you stand by it.' "

This year has been a busy one, too. "We're excited about the new training center in Brisbane and the parts distribution expansion," said Kerrie Keeler, General Manager.

John Deere Limited has begun rolling out the Gold Star dealer program, too, and the growth in C&CE product sales isn't likely to slacken, either. "We have raised the bar with the L-100 Series," said Rod McDonald, Marketing Manager, Commercial & Consumer Equipment Division, John Deere Limited. "That has given us the vehicle to tap into a whole new market segment."

Teamwork is a big help in performing under the stress of high demand.

"We have 240 people here including John Deere Credit, and there is lots of camaraderie," Paltridge said. "People here are very proud of what we do. Being so far from everyone, we work hard at relationships with other parts of John Deere."

It helps, too, that most everyone understands everyone else's job. "Organizationally, our people have had an opportunity to change around in job responsibilities, so there's an appreciation for various parts of the business," Keeler said. "They make decisions more in the context of how it affects everyone, rather than just how it affects a single department."

Employees are kept abreast of company goals and results in quarterly staff meetings, and when the company does well, employees attend an end-of-year celebration.

John Deere Limited employees do more than just work together. "We have a social club in Brisbane, and so does Melbourne," said Ross Johnstone, Manager, Human Resources and Administration. "They hold events throughout the year."

While most companies in Australia have social clubs, the John Deere clubs are particularly active, Johnstone said. The clubs are run by committees, and most employees have a few dollars deducted from their paychecks to fund them. "It helps with morale," Johnstone said.

Overall, good morale is reflected in the John Deere employee survey. John Deere in Australia and New Zealand regularly posts favorable ratings in overall satisfaction that are among the highest in Deere.

The John Deere *experience*

SCOUTS LEARN THE MERITS OF JOHN DEERE

Atop a John Deere 5203 Utility Tractor, Mike Brown, an Eagle Scout and an employee of John Deere dealer Cross Bros., Inc., in New Holland, Ill., helped other Scouts earn the Farm Mechanics Merit Badge at the National Boy Scout Jamboree July 25–Aug. 3 at Fort A.P. Hill in Virginia. It was the first time John Deere's Commercial & Consumer Equipment Division has been a sponsor of the merit badge at the Scout Jamboree. The equipment was provided by Greenline Service Corp. in Fredericksburg, Va. The photo was taken by R.D. Dunkin, a John Deere Harvester Works employee who is a Scoutmaster.

NOW THAT'S SERIOUS RE-CYCLING

Lots of people outfit motorcycles with John Deere colors, but Patrick Prom went further when he put together the bike pictured here. He said he built it of "mostly John Deere parts." Indeed, he said the engine is the starting motor of a John Deere 1949 "R" Tractor; the seat is from a John Deere horse-drawn manure spreader, and the gas tank is from an unstyled "A" Tractor. The wheels and frame are homemade, Prom said.

"HMM...LOOKS LIKE DAD MISSED A SPOT"

Gavin Pynn seems to be wondering how to get all the work done before winter as he moves his cast-iron John Deere pedal tractor through a field behind his house in East Grand Forks, Minn. Gavin is the son of Stephen and Marsha Pynn.

SOMETHING TO LOOK UP TO

Three-year-old Patrick Moore, Jr., enjoying his own John Deere rig, waves to a farmer driving a slightly-higher-horsepower version. Patrick, called PJ, is the son of Patrick and Tonya Moore of Hazlehurst, Ga.

THE FIRST JOHN DEERE FACTORY

creates plows — and launches a debate

Thanks to what was probably a mason's error, compounded by frontier artists, the date of the construction of the original Moline Plow Works has been debated almost since John Deere began making plows there. Contemporary artists, and others since, have continued to portray the building as being built in 1847.

Most evidence, though, suggests that John Deere did not move to Moline until 1848.

Robert Tate and John Gould, Deere's first partners in Moline under the name Deere, Tate & Gould, supported the 1848 date. When posed with the question just before his death, Gould provided the cause of the error:

"Under the supervision of C.O. Nason, some white bricks were inserted in the building, indicating the birth of the plant as being in 1847. When I noticed the error I called Mr. Deere's attention to it and while he admitted the fact of the error said it was then too late to correct it, since it could not very well be changed."

There is a wealth of detail about the formation of a new partnership and the opening of the first factory, and that detail, too, supports the later date.

After ten years of building plows in Deere's Grand Detour, Ill., blacksmith shop, John Deere and Leonard Andrus officially closed out their partnership in May 1848, although Deere and new partner Robert Tate may have begun to survey sites for their new business as early as 1847.

Deere and Tate first visited nearby Peru, "but a lack of timber was a sad stumbling block, although a merchant named Bruister, a man of means, the principal merchant in Peru, would have given us two lots if we would locate there," Tate wrote in his diary.

Discouraged, Deere and Tate visited Rock Island, but a disagreement over the price of waterpower led them to neighboring Moline. There they entered into an agreement for power with General John Buford, and that summer they made quick work forming the new business.

Deere would concentrate his efforts on sales, and Tate was an excellent mechanic, but a missing piece in the foundation of the business sent Deere back to Grand Detour to recruit John Gould, a bookkeeper at Dana & Throop's general store.

Gould later recalled that Deere told him "He and Tate could make plows, but could not attend to the other part of buying and selling and looking after financial matters."

After an initial visit to Moline and an inspection of the premises, Gould recognized the opportunity and moved to Moline.

On June 19, 1848, Deere, Tate, and Gould finally signed an official agreement. John brought his wife, Demarius, to see Moline on the third of July, and three weeks later, on July 28, 1848, Deere, Tate, Gould, and six hired laborers (old man Hibbard, Pomeroy, Wallace, Jones, Philander, and a mason, according to Tate) "raised the rafters of the plow shop at Moline," a 60-foot by 24-foot blacksmith shop.

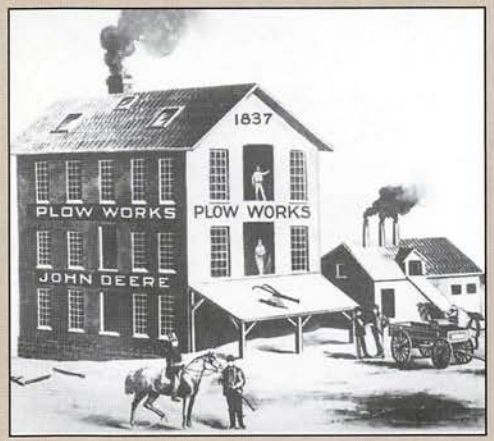
Deere left for Grand Detour the following day but returned to Moline Aug. 16, just in time to witness the most satisfying event to that point, the application of power to the shop. The lack of ready power was one of the things that had limited the growth of Deere and Andrus in Grand Detour. "Started our big belt and our machinery moved for the first time!" On Sept. 26, Tate recorded gleefully that they "finished the first ten plows!"

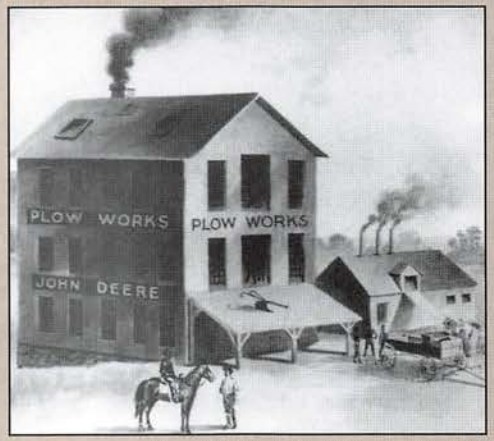
Between July and early November, Deere made the trip between Grand Detour and Moline at least five times to close out his previous business and visit his family. On Oct. 27, 1848, the rest of the Deere family — Demarius and the couple's six children, Jeannette, 18; Ellen, 16; Frances, 14; Charles, 11; Emma, 8; and Alice, 4, arrived in their new home.

John had yet to construct a home, and so the family moved into a small house with Robert Tate and his wife and daughter. Charles Deere later remembered an "uncomfortable winter" and making his bed on a trunk in the hall.

But the discomforts certainly seemed worth suffering. Moline's prospects appeared limitless. Gould noted that Moline "was a very busy new town and there was quite a little boom."

The debate over the date of the original Moline Plow Works is as old as the building itself.





Pictures can be deceiving. In two of these artists' renderings, John Deere's first factory is dated differently, 1837 in one, and 1847 in the other. The 1837 date is usually given as the date John Deere started his blacksmith shop in Grand Detour, and the company dates its history from that, which may be the reason for the gross inaccuracy in the rendering. In the third picture, no date is shown (although the factory apparently did have the legend "1847" inlaid in the front wall). In fact, the factory was probably built in 1848.

JOHN DEERE Agri Services begins growing

When Dan McCabe quotes the old adage that "data isn't useful until it's transformed into information," he goes a step further: "Information isn't that useful, either," he said, "unless you use it to generate insights."

Information and insights developed from it are a big part of McCabe's life these days. He is Senior Vice President, John Deere Agri Services, a business entity created in May. The new unit aims to combine technology with knowledge to build services John Deere can offer throughout the agri-food value chain, from growers and their suppliers to big food and fiber processors and even retailers.

The key is knowledge capital. "Technology and data management have evolved to where we have a lot of information and can collect, move, and analyze it," said McCabe, an accountant by training who was Vice President, Information Technology, before taking on the John Deere Agri Services post.

Insights, though, come from humans, not technology. "It takes human knowledge capital and the intellectual curiosity to search for things; it takes people who understand how to connect the dots," he said.

To create the foundation for what McCabe calls "a significant SVA growth opportunity," Deere & Company is combining under the John Deere Agri Services name several technology- and service-based small companies it has acquired or started up during the last decade.

McCabe's task is to lead the effort to meld into a single business those formerly independent, knowledge-based companies, each of which operates in a discrete technological arena.

"We're less than a year into it," he said. "We have good knowledge capital; we have a lot of technology, although some has to be retooled; and we've proven people are willing to pay for some of our services."

"There is a lot of fragmented, disjointed technology out there," he said. "There are a lot of bright people with good ideas."

What John Deere brings to the field, he said, are the processes and business know-how to assemble the ideas and science into profitable businesses. "They need companies like us, with the bandwidth to handle new ideas, with the connection to customers, and with the ability to bolt technologies together," McCabe said.

McCabe's group plans to keep developing and bolting together technology and ideas until John Deere Agri Services is adding value for customers throughout the agri-food value chain. The opportunities are so great that the John Deere Agri Services leadership team has divided the existing and possible service offerings into three categories. They call the categories "service vectors," because, said John Deere Agri Services, Inc. President Lynn White, they are not just categories of service offerings. "They are defined by separate combinations of value propositions for specific customer groups."

The ways technology can be brought to bear in the agri-food value chain are many. Take, for instance, production optimization, one of the three service vectors the company is pursuing.

Optimizing production in the field isn't much different, in concept, from optimizing production in a factory.

When John Deere employees at the company's factories build equipment, for example, they are employing procedures and technology designed to eliminate variability in the process, and that leads to John Deere quality.

"John Deere is good at managing variability," McCabe said. "You create value by controlling variation."

When that equipment goes to work in the field, however, the farmers who operate it can rely on the equipment, but little else. They are awash in variability, from soil fertility to the timing and amount of rainfall, to input costs and global markets.

John Deere Agri Services can't control those things directly, but it can provide services based on technology and informa-

tion that will let farmers react appropriately — and quickly.

"We can fly over a cotton field and acquire data that can be used to create a detailed map an agronomist can use to create a prescription on a data card that can go into a sprayer," McCabe said. "Then the farmer can apply growth regulator precisely as needed by the plants at every spot in the field. We did that on more than 300,000 acres last summer," he said.

What that means is that at harvest, the cotton plants were closer to the same size, and yield was more uniform across the field. The result was more high-quality cotton and far less loss in harvesting.

The technology employed in that effort isn't entirely new.

What John Deere added to the technology was the business efficiency to deliver the data to an agronomist who could program a sprayer's variable-rate application system within two days, allowing the grower to take timely action.

That's just one example, and it involves only the very beginning of the agri-food value chain.

Other service possibilities lie not only in production optimization, but further along the chain, in a service vector John Deere Agri Services calls strategic sourcing, and in the third service vector, risk management and business intelligence.

Strategic sourcing services are directed mainly at food ingredient companies and food processors, which have their own variability problems. "The value proposition there is better performance of your ingredients," White said. That comes from reducing the variability of the ingredients that go into their processing plants. For food processors, as for other manufacturers, the more uniform the raw material, the more efficient the factory can be.

Risk management and business intelligence services concentrate on providing data and information for decision making, from calculating policy premiums for crop insurance to managing commodity production around weather patterns.

"A lot of this technology has been around a long time," McCabe muses. "The secret sauce we add is applying the operations and process disciplines to make it all connect and create services for customers we understand very well."

MARKETING
is as varied as the technology

John Deere Agri Services, created by merging several smaller technology-based companies, is rapidly developing knowledge-based products and services to meet the needs of the wide array of customer groups.

Marketing diverse services to diverse customer groups will require a similarly wide array of marketing strategies, most of which are still being developed and tested.

For example, among the product classifications the young company has established is production optimization services, aimed at improving productivity of the land. These services are being marketed to ag retailers who provide crop and farm management advice to farmers, said Lynn White, President, John Deere Agri Services, Inc.

Strategic sourcing services, another service category being developed by the company, are currently marketed like industrial accounts — directly to the ingredient companies and food processors that use them.

Marketing strategies also have to take into account the structure of the industry in various places. For some commodities in some countries, the agri-food chain is highly vertically integrated, with some companies owning or controlling most of the process from growing crops to retail product.

In a third category of services, risk management and business intelligence, Agri Services is providing its risk management services mostly to John Deere Credit. "It's almost like a joint venture with the credit company," White said. Agri Services' GeoVeritas database, a massive store of geospatial information, can provide detailed crop production, weather, and market information at the field level in some cases for designing risk management products.

Other more prosaic Agri Services products, such as back-office systems for tracking transactions and grain inventories at elevators, are still being integrated into Agri Services' strategies. They are likely to become critical links in the agri-food chain, as specific genetic traits are developed for specific products, as is happening with corn grown for ethanol production. "Being able to segregate and track commodity volumes with specific characteristics is vitally important in many industries," White said.

He said the company plans to raise John Deere's profile in the markets it's developing. "We deliberately did not make a big brand splash during the launch year for these services," he said, "but in the future, when services are offered, it will be clear that a John Deere company is providing them."

Buy Better, Use Better

is making the bottom line better

Working late at a John Deere facility one night, Mike Lentz looked out the office windows at the factory floor. The last shift had gone home, and he had an unobstructed view of an orderly, efficient John Deere factory.

He wondered about that. Why, he asked, were all the lights on?

"It turned out someone had just forgotten to reprogram the lighting system" when the production schedule changed, he said.

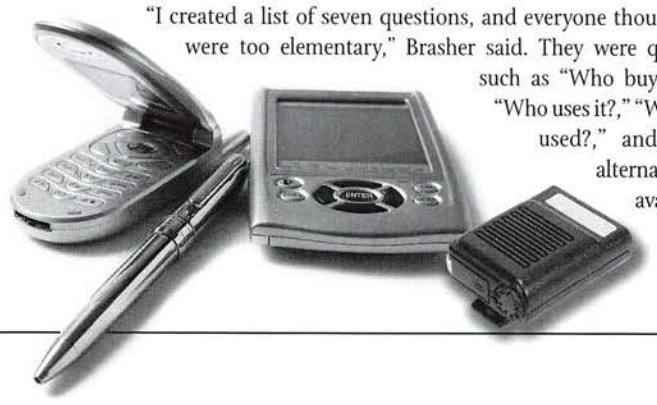
Lentz is Manager of Indirect Support and Processes for John Deere Supply Management. By helping factories form teams to ask about such things as energy use, clerical supplies, tools, and other indirect materials and services, he and Shannon Brasher, a Six Sigma Project Coordinator at Waterloo, Iowa, have led a process that has saved John Deere nearly $150 million over the past three years. Those savings drop directly to the company's bottom line, or, in some cases, have been used to help fund capital improvement projects.

Lentz and Brasher are a kind of roving Continuous Improvement team, helping operations throughout the company apply Six Sigma techniques to indirect materials and services, or IM&S, spend categories. CI teams, the typically production-based work groups that continually fine-tune John Deere operations to improve safety, quality, and efficiency, have similar impacts on the company's results, but deal mostly with direct materials and processes.

Spend Management is an operations-focused initiative aimed solely at the indirect materials and services spend.

That hadn't gotten much attention when Brasher began looking at IM&S at Waterloo at the behest of then-Manager of Manufacturing Dave DeVault. In fact, he found no one could answer basic questions about the spending.

"I created a list of seven questions, and everyone thought they were too elementary," Brasher said. They were questions such as "Who buys this?," "Who uses it?," "When is it used?," and "What alternatives are available?"



The questions may have been elementary. Answering them was not. "Most people couldn't answer more than two of the questions," Brasher said. "No one was able to answer more than three."

Lentz and Brasher got together when Supply Management sent a team including Lentz to Waterloo to give a presentation on a proposed IM&S enterprise process. The team discovered that Brasher and accountant Randy Thomas had put together an IM&S spend management process that had already saved an astonishing four times what they had been asked to try to save for the year.

Lentz and Brasher began working out metrics and procedures for creating an enterprise IM&S spend management process.

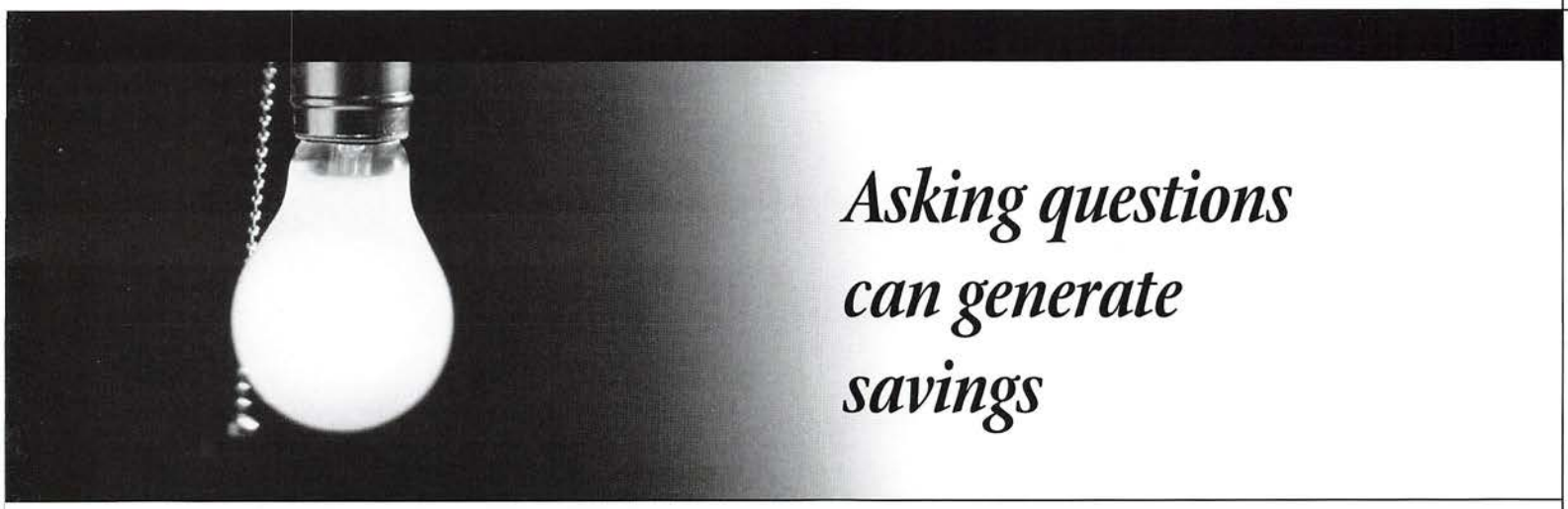
"It's really just using the Six Sigma process to gather and analyze data," Lentz said. "We blended what we were doing with what Waterloo was doing and began refining it as a global process. We looked at what we could do to develop tools that units could use to reduce operational indirect spend," he said.

The tools and procedures are budget-based. Teams are formed around high-level accounts. Of particular interest to such teams is spending that is controlled by procedures and processes that can be fine-tuned, not only to reduce current spending, but also to build the lower cost into the process. "People have made significant structural changes in some aspects of the business," Lentz said.

The first step, of course, is to understand the spend. "You start asking questions," Lentz said. "Often, the answer is, 'We've always done it that way.' What the process has done is enable the business to challenge spending from that perspective," he said.

It also helps find spending that has been added because of changing technology. For example, "Take cell phones," Lentz said. "Does someone need a cell phone, a PDA, *and* a pager? Maybe they do, but you have to ask, and maybe you can find something that combines all those functions into one item."

Asking questions can generate savings from the most mundane processes. One of Brasher's first IM&S experiences at Waterloo began during his first audit of the factory's IM&S spending. It seemed that every desk drawer he opened had half-a-dozen ballpoint pens — nice ones, with



Asking questions can generate savings

gold bezels around the barrels. He did some checking. "They cost $1.15 each," he said, "and there were hundreds of them around that people weren't even using."

Now pens cost the factory 7 cents each, and they are used to write on paper that costs less, too, thanks to another IM&S change in purchasing.

In fact, Lentz and Brasher use a catchphrase to drive the point home. "Buy Better, Use Better," they counsel.

While Lentz and Brasher have led the process of systematizing spend management and spreading it around the enterprise, they didn't have to create everything themselves. There are, after all, few good ideas in the world that haven't been noticed by John Deere employees somewhere, and John Deere Supply Management has been working to lower IM&S spending for years. Lentz and Brasher were able to adopt some things and target unit visits. "Some places already have a robust CI process" working on IM&S spending, Lentz said, "and they don't need another team set up to do this."

Important advances in the process came in 2004 from John Deere's Mannheim factory and from the Agricultural Division's cost management group.

In the first few years, Lentz and Brasher had been tracking projects and savings on individual spreadsheets for each unit. "That made it hard to roll up the results into a single report, and it made it hard to see where the best practices were, and share them," Lentz said.

In Mannheim, they found employees using a Web-based tool to track and help control IM&S spending. "We enabled that for U.S. factories," Lentz said.

Documenting the savings is likewise difficult in a cyclical industry. Volume changes typically require some change in IM&S spending, but how much is appropriate?

"The Ag Division's cost management group had developed a metric we have now deployed which is being used all over the enterprise," Lentz said. "It measures actual budget results month to month, with a volume adjustment."

That means performance is measured against a baseline. The baseline starts with last year's spend, but makes adjustments for, say, product programs that are anticipated or under way. "It gave us a common, consistent way to measure results," Lentz said. "The unit data comes right out of the unit accounting process."

To make sharing ideas even easier, Lentz and Brasher started a community of practice, with monthly meetings and using John Deere Mindshare to post messages and share project details.

After all, IM&S savings usually happen only because people keep expense in mind. "Greeneville is kind of a model for that," Lentz said, referring to the C&CE factory where the 100 Series riding lawn equipment is assembled. "They are always looking at how they can do things differently to save money," he said, citing a project there to refurbish a training room. "The facilities engineer got bids on the furniture, then asked about alternatives. It turned out one supplier had excess cabinets and furniture of high quality that had been ordered for another company that then returned them. They were the right quality and everything, just cheaper, and he knew to ask."

Not that every change saves big money, but it all adds up, even the more informal efforts. "Even without a major project, you can look at what others have done in the category and make some changes anyway and be confident you're saving some money, even if you can't justify the effort to fully document the results," Lentz said.

Success does take some commitment, Brasher notes. He said the success he has had at Waterloo has been aided by unit leadership championing the efforts, and that is an important part of making the projects work.

Adds Lentz, "It takes operations and supply management working together, and when leadership gets behind it, things happen fairly quickly." He said the operating units deserve the credit for identifying and implementing the projects.

Lentz and Brasher both say that, while there have been good results, there is much more to do in helping John Deere manage its IM&S spend.

ORIGINS

HORSEPLAY

"Safety First" is the motto of our accident-prevention committees. Everyone knows what it means. Everyone knows that accidents come from carelessness. But few of us stop to think of one of the worst forms of carelessness—HORSEPLAY.

— *The John Deere Magazine*, Vol. 1 No. 5, May 1918

As the above excerpt from a full-page article in an early company publication shows, John Deere has always made workplace safety a priority. The article noted that it is everyone's duty to eliminate horseplay from the shop.

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